

DDA3 (K-14): sc-160272

BACKGROUND

DDA3, also known as PSRC1 (proline/serine-rich coiled-coil 1) or FP3214, is a 363 amino acid microtubule-associated cytoplasmic oncoprotein involved in p53-regulated growth suppression. DDA3 regulates the mitotic spindle, thereby controlling chromosome segregation and congression. Existing as four alternatively spliced isoforms designated isoform A, B, C and D, DDA3 is widely expressed but found at highest levels in fetal thymus and adult brain. DDA3 interacts with APC2 (adenomatous polyposis coli protein 2) as well as 53BP2 (tumor suppressor p53-binding protein 2), a p53 binding protein whose apoptotic signaling is inhibited by DDA3. The gene encoding DDA3 maps to human chromosome 1p13.3 and mouse chromosome 3 F3.

REFERENCES

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- Sun, W.T., et al. 2008. p53 target DDA3 binds ASPP2 and inhibits its stimulation on p53-mediated BAX activation. *Biochem. Biophys. Res. Commun.* 376: 395-398.
- Jang, C.Y., et al. 2008. DDA3 recruits microtubule depolymerase Kif2a to spindle poles and controls spindle dynamics and mitotic chromosome movement. *J. Cell Biol.* 181: 255-267.
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- Jang, C.Y., et al. 2009. The N-terminal domain of DDA3 regulates the spindle-association of the microtubule depolymerase Kif2a and controls the mitotic function of DDA3. *Cell Cycle* 8: 3165-3171.
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CHROMOSOMAL LOCATION

Genetic locus: PSRC1 (human) mapping to 1p13.3; Psrc1 (mouse) mapping to 3 F3.

SOURCE

DDA3 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DDA3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160272 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DDA3 (K-14) is recommended for detection of DDA3 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DDA3 siRNA (h): sc-88718, DDA3 siRNA (m): sc-142913, DDA3 shRNA Plasmid (h): sc-88718-SH, DDA3 shRNA Plasmid (m): sc-142913-SH, DDA3 shRNA (h) Lentiviral Particles: sc-88718-V and DDA3 shRNA (m) Lentiviral Particles: sc-142913-V.

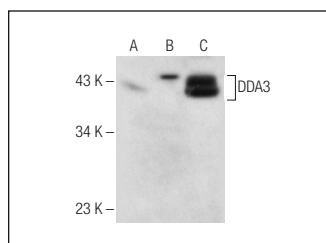
Molecular Weight of DDA3: 39 kDa.

Positive Controls: DDA3 (h): 293T Lysate: sc-116630, DDA3 (m): 293T Lysate: sc-119695 or MCF7 whole cell lysate: sc-2206.

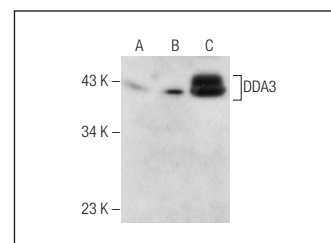
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



DDA3 (K-14): sc-160272. Western blot analysis of DDA3 expression in non-transfected 293T: sc-117752 (A), human DDA3 transfected 293T: sc-116630 (B) and MCF7 (C) whole cell lysates.



DDA3 (K-14): sc-160272. Western blot analysis of DDA3 expression in non-transfected 293T: sc-117752 (A), mouse DDA3 transfected 293T: sc-119695 (B) and MCF7 (C) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.